# **Epitomes**

### **Important Advances in Clinical Medicine**

## **Urology**

The Scientific Board of the California Medical Association presents the following inventory of items of progress in urology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established both as to scientific fact and important clinical significance. The items are presented in simple epitome and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist busy practitioners, students, research workers, or scholars to stay abreast of these items of progress in urology that have recently achieved a substantial degree of authoritative acceptance, whether in their own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Urology of the California Medical Association, and the summaries were prepared under its direction.

Reprint requests to Division of Scientific and Educational Activities, California Medical Association, PO Box 7690, San Francisco, CA 94120-7690

#### Continent Urinary Diversions— Are Appliances Necessary?

DURING THE 1980s many advances have been made in the use of continent urinary diversion for patients with cystectomy. Not only are dry reservoir diversions to the skin becoming available, but more recently internal diversions back to the urethra or to the rectum have become popular. With these advances, cystectomy patients may no longer need to wear an external urostomy bag.

Continent diversions rely on transforming bowel segments into urinary reservoirs with functioning sphincters or valves to prevent reflux and to allow for controlled emptying. While most urologists agree that continent diversions are inherently preferable to those requiring bags, the conduit diversions are still not without advocates. The controversy surrounding continent diversions involves their seeming complexity. Conduits carry with them a track record of more than 30 years of reproducibility and an acceptable rate of short-term complications. More important, the conduit operation can be done safely by most urologists. Continent diversions, on the other hand, are more technically complex and demanding for surgeons and patients alike. The increased operative time required can be accompanied by increased complication rates. The learning curve for surgeons undertaking continent diversion for the first time may be long, which explains why many centers have been slow to adopt this procedure. Where these diversions have been carried out in any number, however, the results have been extremely satisfying. Studies have shown that the quality of life for patients having urinary diversions is enhanced when a continent diversion is employed. A substantial positive difference is noted in these patients in the areas of self-confidence, self-image, physical assuredness, interpersonal relations, and sexual desires compared with those having ileal conduits. With experience, complication rates between the different types of urinary diversions are nearly equivalent. Total continence is not always achieved, and, in our series, 10% to 15% of patients having continent diversions may require surgical revision to achieve an acceptable level of continence.

While continent diversions to the skin have received the most attention, the use of reservoir diversions to the urethra

and rectum is being investigated diligently. The concern with internal diversion has been continence. With the method now used to construct diversion reservoirs from detubularized bowel—usually ileum or cecum—extremely low internal pressures can be achieved, allowing for better continence control by the native sphincter mechanisms (external urinary sphincter or anus). Diversions to the urethra are most applicable in men requiring cystectomy who do not have cancer involving the urethra. Rectal diversions with urinary reservoirs may be appropriate in men and women who are not candidates for diversion to the urethra and who do not wish to have a stoma, even a continent one.

In 1989, experience has established that

- Continent diversions, whether to the skin, urethra, or rectum, can replace conduit diversions in most instances;
- Continent diversions are not difficult to construct or maintain;
- Detubularized segments of bowel that are refashioned into reservoirs have improved compliance and provide larger capacities than tubular segments; and
- Patients will demand to be informed about these types of diversions and about the associated quality of life issues.

To benefit fully from these diversions, patients should have the intelligence, maturity, and manual dexterity to care for their own diversions and the life expectancy necessary to resume an active life-style.

STUART D. BOYD, MD Los Angeles

#### REFERENCES

Boyd SD, Feinberg SM, Skinner DG, et al: Quality of life survey of urinary diversion patients: Comparison of ileal conduits versus continent Kock ileal reservoirs. J Urol 1987; 138:1386-1389

Kock NG, Ghoneim MA, Lycke KG, et al: Urinary diversions to the augmented and valved rectum: Preliminary results with a novel surgical procedure. J Urol 1988; 140:1375-1379

Skinner DG, Lieskovsky G, Boyd SD: Continent urinary diversion. J Urol 1989; 141:1323-1327

#### **Interstitial Cystitis**

THE SYMPTOM COMPLEX of urinary frequency and urgency, associated with suprapubic pain, lower back pain, and dyspareunia, commonly occurs in women with urinary tract infection. When these symptoms persist despite antibiotic therapy